

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-27. (Canceled)

28. (Currently amended) An insulated electrical wire comprising
- 1) a metallic conductor, and
 - 2) insulation which comprises
 - (i) a first layer which is composed of a first polymeric composition consisting of a first polymeric component and optionally a first additive non-polymeric component, the first polymeric component comprising at least 60% by weight, based on the weight of the first polymeric component, of a carbonyl-containing polymer comprising at least 5% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from a monomer which can be copolymerized with an olefinic monomer and which contains a carboxylic acid ester group, and
 - (ii) a second layer which is in direct contact with the first layer at an interface, and which is composed of a second polymeric composition consisting of a second polymeric component and optionally a second additive non-polymeric component, the second polymeric component comprising at least 50% by weight, based on the weight of the second polymeric composition, of at least one of polyvinylidene fluoride (PVDF) or and a vinylidene fluoride (VDF) copolymer consisting essentially of
 - (a) repeating units derived from vinylidene fluoride, and
 - (b) repeating units derived from a fluorinated comonomer;
- the first layer being positioned between the conductor and the second layer.

29. (Currently amended) An insulated wire according to claim 28 + wherein the first and second layers have been subjected, while in direct contact with each other, to conditions which cause crosslinking of polymers at the interface between them.

30. (Currently amended) An insulated wire according to claim 29 wherein the crosslinking of polymers at the interface is such that at least one of the following conditions is fulfilled:

- (a) the peel bond strength between the layers, measured by ASTM 81876- 95, is at least 5N,

(b) when a sample of the insulated electrical wire 60 mm long is immersed to a depth of 42 mm in a bath of acetone ~~4.2 mm deep~~ at 23 °C for 1 hour, there is no delamination of the two layers, and

(c) the peel bond strength between the layers after the crosslinking, measured by ASTM B1876-95, is at least 100% greater than the peel bond strength between the layers before the crosslinking, measured by ASTM B1876-95.

31. (Currently amended) An insulated wire according to claim 28 wherein the first polymeric component consists essentially of the carbonyl-containing polymer and polyethylene a-polyolefin.

32. (Currently amended) An insulated wire according to claim ~~28~~ 34 wherein the first polymeric component consists essentially of the carbonyl-containing polymer and high density polyethylene.

33. (Currently amended) An insulated wire according to claim 28 wherein the second polymeric composition comprises at least 50% by weight, based on the weight of the second polymeric composition, of a copolymer of VDF and hexafluoropropylene (HFP) the VDF copolymer, and the VDF copolymer contains 8 to 12% by weight, based on the weight of the copolymer, of units derived from hexafluoropropylene.

34-36. (Canceled)

37. (Currently amended) An insulated electrical wire comprising

- 1) a metallic conductor, and
- 2) insulation which comprises
 - (i) a first layer which is composed of a first polymeric composition consisting of a first polymeric component and optionally a first additive non-polymeric component, the first polymeric component consisting essentially of 60 to 100% by weight, based on the weight of the first polymeric component composition, of a carbonyl-containing polymer, and 0 to 40% by weight, based on the weight of the first polymeric component composition, of polyethylene a-polyolefin, the carbonyl-containing polymer having a non-aromatic backbone and consisting essentially of
 - (a) 9 to 100% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from a monomer which can be copolymerized with an olefin and which contains a carboxylic acid ester group, and

- (b) 91 to 0% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from an olefin; and
- (ii) a second layer which is in direct contact with the first layer at an interface, and which is composed of a second polymeric composition consisting of a second polymeric component and optionally a second additive non-polymeric component, the second polymeric component comprising 90 to 100% by weight, based on the weight of the second polymeric composition, of ~~at least one of~~ polyvinylidene fluoride (PVDF) or ~~and~~ a vinylidene fluoride (VDF) copolymer consisting essentially of
 - (a) repeating units derived from vinylidene fluoride, and
 - (b) repeating units derived from a fluorinated comonomer;

the first layer being positioned between the conductor and the second layer.

38. (Currently amended) An insulated wire according to claim 37 wherein the first and second layers have been subjected, while in direct contact with each other, to ionizing radiation which has caused ~~causes~~ cross-linking of polymers at the interface; ~~[[,]]~~ and at least one of the layers, when the layers were ~~before the layers are~~ subjected to the ionizing radiation, contained ~~contains~~ a radiation cross-linking promoter.

39. (Currently amended) An insulated wire according to claim 38 wherein the crosslinking of polymers at the interface is such that, when a sample of the insulated electrical wire 60 mm long is immersed to a depth of 42 mm in a bath of acetone ~~4.2 mm deep~~ at 23°C for 1 hour, there is no delamination of the two layers.

40. (Currently amended) An insulated wire according to claim 37 wherein the first polymeric component ~~modified polyolefin composition~~ comprises at least 80% ~~80 to 100%~~ by weight, based on the weight of the first polymeric component, of the carbonyl-containing polymer.

41. (Canceled)

42. (Previously presented) An insulated wire according to claim 37 wherein the carbonyl-containing polymer contains 15 to 28% by weight, based on the weight of the carbonyl-containing polymer, of the repeating units containing a carboxylic acid ester group.

43. (Currently amended) An insulated wire according to claim 37 wherein the repeating units containing a carboxylic acid ester group comprise units derived from vinyl acetate or an alkyl acrylate.

44-45. (Canceled)

46. (Previously presented) An insulated wire according to claim 37 wherein the first polymeric component consists essentially of high-density polyethylene and at least 80% of the carbonyl-containing polymer.

47. (Currently amended) An insulated electrical wire comprising

- 1) a metallic conductor, and
- 2) insulation which comprises
 - (i) a first layer which surrounds and directly contacts the metallic conductor, and which is composed of a first polymeric composition consisting of a first polymeric component and optionally a first additive ~~non-polymeric~~ component, the first polymeric component consisting essentially of 60 to 100% by weight, based on the weight of the first polymeric component, of a carbonyl-containing polymer, and 0 to 40% by weight, based on the weight of the first polymeric component, of polyethylene, the carbonyl-containing polymer having a non-aromatic backbone and consisting essentially of
 - (a) 15 to 28% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from an alkyl acrylate, and
 - (b) 85 to 72% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from ethylene; and
 - (ii) a second layer which surrounds and directly contacts the first layer and which is composed of a second polymeric composition consisting of a second polymeric component and optionally a second additive ~~non-polymeric~~ component, the second ~~first~~ polymeric component comprising 90 to 100% by weight, based on the weight of the second polymeric composition, of a vinylidene fluoride (VDF) copolymer consisting essentially of
 - (a) 88 to 92% by weight, based on the weight of the VDF copolymer, of repeating units derived from vinylidene fluoride, and
 - (b) 8 to 12% by weight, based on the weight of the VDF copolymer, of repeating units derived from a fluorinated comonomer.

48. (Currently amended) An insulated wire according to claim 47 wherein the first and second layers have been subjected, while in direct contact with each other, to ionizing radiation which has caused ~~causes~~ cross-linking of polymers at the interface, and at least one of the layers, when the layers were subjected to the ionising radiation, contained ~~contains~~ a radiation cross-linking promoter.

49. (Currently amended) An insulated wire according to claim 48 wherein the crosslinking of polymers at the interface is such that, when a sample of the insulated electrical wire 60 mm long is immersed to a depth of 42 mm in a bath of acetone ~~4.2 mm deep~~ at 23°C for 1 hour, there is no delamination of the two layers.

50. (Previously presented) An insulated wire according to claim 47 wherein the alkyl acrylate is one or both of ethyl acrylate and methyl acrylate.

51. (Currently amended) A method of making an insulated wire, the method comprising the steps of

- (A) providing ~~a metallic an electrical~~ conductor surrounded by
- (i) a first layer which is composed of a first polymeric composition consisting of a first polymeric component and optionally a first additive ~~non-polymeric~~ component, the first polymeric component comprising at least 60% by weight, based on the weight of the first polymeric component, of a carbonyl-containing polymer containing at least 5% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from a monomer which can be copolymerized with an olefinic comonomer and which contains a carboxylic acid ester group; and
 - (ii) a second layer which is composed of a second polymeric composition consisting of a second polymeric component and optionally a second additive ~~non-polymeric~~ component, the second polymeric component comprising at least 50% by weight, based on the weight of second polymeric composition, of a fluoropolymer which is ~~at least one of~~ polyvinylidene fluoride (PVDF) or ~~and~~ a vinylidene fluoride (VDF) copolymer consisting essentially of
 - (a) repeating units derived from vinylidene fluoride, and
 - (b) repeating units derived from a fluorinated comonomer;
- the first and second layers being in direct contact with each other at an interface, and the first layer being positioned between the conductor and the second layer; and
- (B) exposing the layers while in contact with each other to ionizing radiation which causes cross-linking of polymers at the interface.

52. (Currently amended) A method according to claim 51 wherein step (A) comprises bringing the respective layers into contact with each other at a temperature above the melting or softening point of the polymeric material in at least one of the layers.

53. (Previously presented) A method according to claim 51 wherein step (A) includes pressure-extruding layer (i) onto the conductor.

54. (Previously presented) A method according to claim 51 wherein step (A) comprises coextruding the layers (i) and (ii) onto the conductor in a single pass of the conductor from an extrusion process pay-out device to an extrusion process take-up device.

55-56. (Canceled)

57. (New) An insulated electrical wire comprising

- 1) a metallic conductor, and
- 2) insulation which comprises
 - (i) a first layer which is composed of a first polymeric composition comprising at least 60% by weight, based on the weight of the first polymeric composition, of a carbonyl-containing polymer comprising at least 5% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from a monomer which can be copolymerized with an olefinic monomer and which contains a carboxylic acid ester group, and
 - (ii) a second layer which is in direct contact with the first layer at an interface, and which is composed of a second polymeric composition comprising at least 50% by weight, based on the weight of the second polymeric composition, of polyvinylidene fluoride (PVDF) or a vinylidene fluoride (VDF) copolymer consisting essentially of
 - (a) repeating units derived from vinylidene fluoride, and
 - (b) repeating units derived from a fluorinated comonomer;

the first layer being positioned between the conductor and the second layer.

58. (New) An insulated wire according to claim 57 wherein the first and second layers have been subjected, while in direct contact with each other, to conditions which have caused crosslinking of polymers at the interface between them.

59. (New) An insulated wire according to claim 58 wherein the crosslinking of polymers at the interface is such that at least one of the following conditions is fulfilled:

- (a) the peel bond strength between the layers, measured by ASTM 81876- 95, is at least 5N,
- (b) when a sample of the insulated electrical wire 60 mm long is immersed to a depth of 42mm in a bath of acetone at 23°C for 1 hour, there is no delamination of the two layers, and

(c) the peel bond strength between the layers after the crosslinking, measured by ASTM B1876-95, is at least 100% greater than the peel bond strength between the layers before the crosslinking, measured by ASTM B1876-95.

60. (New) An insulated wire according to claim 57 wherein the first polymeric composition comprises a first polymeric component which consists essentially of the carbonyl-containing polymer and high density polyethylene.

61. (New) An insulated wire according to claim 57 wherein the second polymeric composition comprises at least 50% by weight, based on the weight of the second polymeric composition, of the VDF copolymer, and the VDF copolymer is a copolymer of VDF and hexafluoropropylene (HFP) which contains 8 to 12 % by weight, based on the weight of the copolymer, of units derived from HFP.

62. (New) An insulated electrical wire comprising

- 1) a metallic conductor, and
- 2) insulation which comprises

(i) a first layer which is composed of a first polymeric composition comprising 60 to 100% by weight, based on the weight of the first polymeric composition, of a carbonyl-containing polymer, and 0 to 40% by weight, based on the weight of the first polymeric composition, of high-density polyethylene, the carbonyl-containing polymer having a non-aromatic backbone and consisting essentially of

(a) 9 to 100% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from a monomer which can be copolymerized with an olefin and which contains a carboxylic acid ester group, and

(b) 91 to 0% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from an olefin; and

(ii) a second layer which is in direct contact with the first layer at an interface, and which is composed of a second polymeric composition comprising 90 to 100% by weight, based on the weight of the second polymeric composition, of polyvinylidene fluoride (PVDF) or a vinylidene fluoride (VDF) copolymer consisting essentially of

(a) repeating units derived from vinylidene fluoride, and

(b) repeating units derived from a fluorinated comonomer;

the first layer being positioned between the conductor and the second layer.

63. (New) An insulated wire according to claim 62 wherein the first and second layers have been subjected, while in direct contact with each other, to ionizing radiation which has caused cross-linking of polymers at the interface.
64. (New) An insulated wire according to claim 62 wherein the first polymeric composition comprises at least 80% by weight, based on the weight of polymers therein, of the carbonyl-containing polymer.
65. (New) An insulated wire according to claim 62 wherein the carbonyl-containing polymer contains 15 to 28% by weight, based on the weight of the carbonyl-containing polymer, of the repeating units containing a carboxylic acid ester group.
66. (New) An insulated wire according to claim 62 wherein the repeating units containing a carboxylic acid ester group comprise units derived from vinyl acetate, ethyl acrylate or methyl acrylate.
67. (New) An insulated wire according to claim 62 wherein the polymeric portion of the first polymeric composition consists essentially of high-density polyethylene and the carbonyl-containing polymer.
68. (New) An insulated electrical wire comprising
- 1) a metallic conductor, and
 - 2) insulation which comprises
 - (i) a first layer which surrounds and directly contacts the metallic conductor, and which is composed of a first polymeric composition comprising a polymeric component consisting essentially of 60 to 100% by weight, based on the weight of the first polymeric component, of a carbonyl-containing polymer, and 0 to 40% by weight, based on the weight of the first polymeric component, of high-density polyethylene, the carbonyl-containing polymer having a non-aromatic backbone and consisting essentially of
 - (a) 15 to 28% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from an alkyl acrylate, and
 - (b) 85 to 72% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from ethylene; and
 - (ii) a second layer which surrounds and directly contacts the first layer and which is composed of a second polymeric composition comprising 90 to 100% by weight, based on the weight of the second polymeric composition, of a vinylidene fluoride (VDF) copolymer consisting essentially of

- (a) 88 to 92% by weight, based on the weight of the VDF copolymer, of repeating units derived from vinylidene fluoride, and
- (b) 8 to 12% by weight, based on the weight of the VDF copolymer, of repeating units derived from a fluorinated comonomer.

69. (New) An insulated wire according to claim 68 wherein the first and second layers have been subjected, while in direct contact with each other, to ionizing radiation which has caused cross-linking of polymers at the interface.

70. (New) An insulated wire according to claim 68 wherein the alkyl acrylate is one or both of ethyl acrylate and methyl acrylate.

71. (New) A method of making an insulated wire, the method comprising the steps of

- (A) providing an electrical conductor surrounded by
 - (i) a first layer which is composed of a first polymeric composition comprising at least 60% by weight, based on the weight of the first polymeric composition, of a carbonyl-containing polymer containing at least 5% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from a monomer which can be copolymerized with an olefinic comonomer and which contains a carboxylic acid ester group; and
 - (ii) a second layer which is composed of a second polymeric composition comprising at least 50% by weight, based on the weight of second polymeric composition, of a fluoropolymer which is polyvinylidene fluoride (PVDF) or a vinylidene fluoride (VDF) copolymer consisting essentially of
 - (a) repeating units derived from vinylidene fluoride, and
 - (b) repeating units derived from a fluorinated comonomer;

the first and second layers being in direct contact with each other at an interface, and the first layer being positioned between the conductor and the second layer; and
- (B) exposing the layers while in contact with each other to ionizing radiation which causes cross-linking of polymers at the interface.

72. (New) An insulated electrical wire comprising

- 1) a metallic conductor, and
- 2) insulation which comprises
 - (i) a first layer which is composed of a first polymeric composition consisting of a first polymeric component and optionally at least one additive selected from cross-linking promoters, antioxidants, pigments, fillers, flame retardants, stabilizers and process aids, the first polymeric component

comprising at least 60% by weight, based on the weight of the first polymeric component, of a carbonyl-containing polymer having a non-aromatic backbone and comprising at least 5% by weight, based on the weight of the carbonyl-containing polymer, of repeating units derived from a monomer which can be copolymerized with an olefinic monomer and which contains a carboxylic acid ester group, and

(ii) a second layer which is in direct contact with the first layer at an interface, and which is composed of a second polymeric composition consisting of a second polymeric component and optionally at least one additive selected from cross-linking promoters, antioxidants, pigments, fillers, flame retardants, stabilizers, process aids and plasticizers, the second polymeric component comprising at least 50% by weight, based on the weight of the second polymeric composition, of polyvinylidene fluoride (PVDF) or a vinylidene fluoride (VDF) copolymer consisting essentially of

- (a) repeating units derived from vinylidene fluoride, and
- (b) repeating units derived from a fluorinated comonomer;

the first layer being positioned between the conductor and the second layer.

73. (New) An insulated electrical wire according to claim 72 wherein the first polymeric composition consists of the first polymeric component and optionally at least one additive selected from cross-linking promoters, antioxidants, pigments, fillers and flame retardants; and the second polymeric composition consists of the second polymeric component and optionally at least one additive selected from cross-linking promoters, pigments, plasticizers, stabilizers, antioxidants and process aids.